

## Addition table row handouts and instructions.

Cut these pages into strips and distribute to groups. The later rows take more work, so a group that has an earlier row should get at least two rows to do.

When groups have finished, give a base plate to the "0+" row group and have them snap their stacks onto the plate, leaving no gaps. Note that the corner stack is empty:  $0+0=0$ . Then have the "1+" snap theirs on, again with no gaps. Check to make sure that the pattern is correct. After the "2+" row, it should be clear (visually/physically) what the pattern is.

Build one stack of Legos for each entry in this row of the addition table. Fill in the rest of the values before you start.

A plate has height 1; a brick has height 3. Use as many bricks as possible.

+	0	1	2	3	4	5	6	7	8	9	10
0	0	1	2								

Build one stack of Legos for each entry in this row of the addition table. Fill in the rest of the values before you start.

A plate has height 1; a brick has height 3. Use as many bricks as possible.

+	0	1	2	3	4	5	6	7	8	9	10
1	1	2	3								

Build one stack of Legos for each entry in this row of the addition table. Fill in the rest of the values before you start.

A plate has height 1; a brick has height 3. Use as many bricks as possible.

+	0	1	2	3	4	5	6	7	8	9	10
2	2	3	4								

Build one stack of Legos for each entry in this row of the addition table. Fill in the rest of the values before you start.

A plate has height 1; a brick has height 3. Use as many bricks as possible.

+	0	1	2	3	4	5	6	7	8	9	10
3	3	4	5								

Build one stack of Legos for each entry in this row of the addition table. Fill in the rest of the values before you start.

A plate has height 1; a brick has height 3. Use as many bricks as possible.

+	0	1	2	3	4	5	6	7	8	9	10
4	4	5	6								

Build one stack of Legos for each entry in this row of the addition table. Fill in the rest of the values before you start.

A plate has height 1; a brick has height 3. Use as many bricks as possible.

+	0	1	2	3	4	5	6	7	8	9	10
5	5	6	7								

Build one stack of Legos for each entry in this row of the addition table. Fill in the rest of the values before you start.

A plate has height 1; a brick has height 3. Use as many bricks as possible.

+	0	1	2	3	4	5	6	7	8	9	10
6	6	7	8								

Build one stack of Legos for each entry in this row of the addition table. Fill in the rest of the values before you start.

A plate has height 1; a brick has height 3. Use as many bricks as possible.

+	0	1	2	3	4	5	6	7	8	9	10
7	7	8	9								

Build one stack of Legos for each entry in this row of the addition table. Fill in the rest of the values before you start.

A plate has height 1; a brick has height 3. Use as many bricks as possible.

+	0	1	2	3	4	5	6	7	8	9	10
8	8	9	10								

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Build one stack of Legos for each entry in this row of the addition table. Fill in the rest of the values before you start.

A plate has height 1; a brick has height 3. Use as many bricks as possible.

+	0	1	2	3	4	5	6	7	8	9	10
9	9	10	11								

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Build one stack of Legos for each entry in this row of the addition table. Fill in the rest of the values before you start.

A plate has height 1; a brick has height 3. Use as many bricks as possible.

+	0	1	2	3	4	5	6	7	8	9	10
10	10	11	12								

## Multiplication table row handouts and instructions.

Cut these pages into strips and distribute to groups. The later rows take *much* more work, so a group that has an earlier row should get at least two rows to do. Note that the "0 times" row requires no work: all entries have height 0. Give this group the "1 times" row, too. The later rows get *very* tall! This is part of the point of this activity.

When groups have finished, give a base plate to the "0 times" row group and have them snap their stacks onto the plate, leaving no gaps. Make sure that the "0 times" group leaves an empty row, and that each successive group leaves an empty space as the "times 0" entry. Then have the "1 times" snap theirs on, again with no gaps. Check to make sure that the pattern is correct. The physical patterns are not so obvious as for the addition table. The tall stacks sometimes fall over, so be careful when passing around the base plate.

Build one stack of Legos for each entry in this row of the multiplication table. Fill in the rest of the values before you start.

A plate has height 1; a brick has height 3. Use as many bricks as possible.

x	0	1	2	3	4	5	6	7	8	9	10
0	0	0	0								

Build one stack of Legos for each entry in this row of the multiplication table. Fill in the rest of the values before you start.

A plate has height 1; a brick has height 3. Use as many bricks as possible.

x	0	1	2	3	4	5	6	7	8	9	10
1	0	1	2								

Build one stack of Legos for each entry in this row of the multiplication table. Fill in the rest of the values before you start.

A plate has height 1; a brick has height 3. Use as many bricks as possible.

x	0	1	2	3	4	5	6	7	8	9	10
2	0	2	4								

Build one stack of Legos for each entry in this row of the multiplication table. Fill in the rest of the values before you start.

A plate has height 1; a brick has height 3. Use as many bricks as possible.

x	0	1	2	3	4	5	6	7	8	9	10
3	0	3	6								

Build one stack of Legos for each entry in this row of the multiplication table. Fill in the rest of the values before you start.

A plate has height 1; a brick has height 3. Use as many bricks as possible.

x	0	1	2	3	4	5	6	7	8	9	10
4	0	4	8								

Build one stack of Legos for each entry in this row of the multiplication table. Fill in the rest of the values before you start.

A plate has height 1; a brick has height 3. Use as many bricks as possible.

x	0	1	2	3	4	5	6	7	8	9	10
5	0	5	10								

Build one stack of Legos for each entry in this row of the multiplication table. Fill in the rest of the values before you start.

A plate has height 1; a brick has height 3. Use as many bricks as possible.

x	0	1	2	3	4	5	6	7	8	9	10
6	0	6	12								

Build one stack of Legos for each entry in this row of the multiplication table. Fill in the rest of the values before you start.

A plate has height 1; a brick has height 3. Use as many bricks as possible.

x	0	1	2	3	4	5	6	7	8	9	10
7	0	7	14								

Build one stack of Legos for each entry in this row of the multiplication table. Fill in the rest of the values before you start.

A plate has height 1; a brick has height 3. Use as many bricks as possible.

x	0	1	2	3	4	5	6	7	8	9	10
8	0	8	16								

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Build one stack of Legos for each entry in this row of the multiplication table. Fill in the rest of the values before you start.

A plate has height 1; a brick has height 3. Use as many bricks as possible.

x	0	1	2	3	4	5	6	7	8	9	10
9	0	9	18								

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Build one stack of Legos for each entry in this row of the multiplication table. Fill in the rest of the values before you start.

A plate has height 1; a brick has height 3. Use as many bricks as possible.

x	0	1	2	3	4	5	6	7	8	9	10
10	0	10	20								